

IN THE CLAIMS

Please amend the claims as follows:

1. (Original) A communication channel comprising:
 - a link level protocol having an input, an output, a driver line and a receiver line;
 - a driver connected to the driver line, wherein the driver includes a driver output, a driver circuit, and an impedance control circuit, wherein the impedance control circuit includes an impedance control output connected to the driver circuit, and wherein the impedance control circuit modifies a driver output signal as a function of an external signal;
 - a canceller/equalizer connected to the driver line and the driver output, wherein the canceller/equalizer includes an canceller/equalizer output, and wherein the canceller/equalizer generates a receive signal as a function of data on the driver line and the driver output; and
 - a receiver connected to the receiver line and the canceller/equalizer output.
2. (Original) The communication channel of claim 1 wherein the external signal is the temperature of a resistive circuit.
3. (Original) A communication channel comprising:
 - a link level protocol having an input, an output, a driver line and a receiver line;
 - a driver connected to the driver line, wherein the driver includes a driver output;
 - a canceller/equalizer connected to the driver line and the driver output, wherein the canceller/equalizer includes an canceller/equalizer output, and wherein the canceller/equalizer generates a receive signal as a function of data on the driver line and the driver output; and
 - a receiver connected to the receiver line and the canceller/equalizer output, wherein the receiver includes a receiver circuit and a bit deskew circuit, wherein the bit deskew circuit deskews signals from the receiver circuit as a function of a clock signal.
4. (Original) The communication channel of claim 3 wherein the receiver further comprising a clock receiver, wherein the clock receiver has a clock receiver output connected to the bit deskew, and wherein the clock receiver receives the clock signal and centers the clock.
5. (Currently Amended) A communication channel comprising:
 - a link level protocol having an input, an output, a driver line and a receiver line;

a driver connected to the driver line, wherein the driver includes a driver output, a driver circuit, and an impedance control circuit, wherein the impedance control circuit includes an impedance control output connected to the driver circuit, and wherein the impedance control circuit modifies a driver output signal as a function of an external signal;

a canceller/equalizer connected to the driver line and the driver output, wherein the canceller/equalizer includes an canceller/equalizer output, and wherein the canceller/equalizer generates a receive signal as a function of data on the driver line and the driver output; and

a receiver connected to the receiver line and the canceller/equalizer output, wherein the receiver includes a receiver circuit and a bit deskew circuit, wherein the bit deskew circuit deskews signals from the receiver circuit as a function of a clock ~~signal~~ signal.

6. (Original) The communication channel of claim 5 wherein the external signal is a voltage across a resistive circuit.

7. (Original) The communication channel of claim 5 wherein the receiver further comprising a clock receiver, wherein the clock receiver has a clock receiver output connected to the bit deskew, and wherein the clock receiver receives the clock signal and centers the clock.

8. (Original) A method of transferring data across a communication medium, comprising driving an output signal on the communication medium as a function of a first signal, wherein driving includes modifying the output signal as a function of an external signal, wherein modifying the output signal includes increasing voltage swing of the output signal as a function of temperature;

receiving a second signal from the communication medium;

combining the first and second signals to extract a receive signal; and

deskewing the receive signal.

9. (Original) A method of transferring data across a communication medium, comprising driving an output signal on the communication medium as a function of a first signal; receiving a second signal from the communication medium; combining the first and second signals to extract a receive signal; and deskewing the receive signal, wherein deskewing includes modifying the receive signal as a function of a clock signal.

10. (Currently Amended) A communications medium comprising:

a plurality of processors including a first and second processor, wherein each processor includes at least one processor line;

a first transceiver connected to the first processor and to the communications ~~medium~~ medium, wherein the first transceiver comprises a link level protocol, a driver including a driver circuit and an impedance control circuit, a canceller/equalizer, and a receiver; and

a second transceiver connected to the second processor and to the communications medium, wherein the second processor communicates with the first processor over the communications medium.

11. (Original) The communications medium of claim 10 wherein the impedance control circuit modifies a driver output signal as a function of an external signal.

12. (Original) The communications medium of claim 10 wherein the canceller/equalizer connects to a driver line and a driver output, and wherein the canceller/equalizer generates a receive signal as a function of data on the driver line and the driver output.

13. (Currently Amended) A communications medium comprising:

a plurality of processors including a first and second processor, wherein each processor includes at least one processor line;

a first transceiver connected to the first processor and to the communications ~~medium~~ medium, wherein the first transceiver comprises a link level protocol, a driver, a canceller/equalizer, and a receiver including a receiver circuit and a bit deskew circuit; and

a second transceiver connected to the second processor and to the communications medium, wherein the second processor communicates with the first processor over the communications medium.

14. (Original) The communications medium of claim 13 wherein the bit deskew circuit deskews signals from the receiver circuit as a function of a clock signal.

15. (Original) The communications medium of claim 13 wherein the canceller/equalizer connects to a driver line and a driver output, and wherein the canceller/equalizer generates a receive signal as a function of data on the driver line and the driver output.

16. (Currently Amended) A communications medium comprising:

a plurality of processors including a first and second processor, wherein each processor includes at least one processor line;

a first transceiver connected to the first processor and to the communications ~~medium~~ medium, wherein the first transceiver comprises a link level protocol, a driver including a driver circuit and an impedance control circuit, a canceller/equalizer, and a receiver including a receiver circuit and a bit deskew circuit; and

a second transceiver connected to the second processor and to the communications medium, wherein the second processor communicates with the first processor over the communications medium.

17. (Original) The communications medium of claim 16 wherein the impedance control circuit modifies a driver output signal as a function of an external signal.

18. (Original) The communications medium of claim 16 wherein the bit deskew circuit deskews signals from the receiver circuit as a function of a clock signal.

19. (Currently Amended) The communications medium of claim 16 wherein the canceller/equalizer connects to a driver line and a driver output, and wherein the canceller/equalizer generates a receive signal as a function of data on the driver line and the driver ~~output~~ output.

20. (Currently Amended) A communications medium comprising:

a processor with at least one processor line; and

a transceiver connected to the processor and to the communications ~~medium~~ medium, wherein the transceiver comprises a link level protocol, a driver including a driver circuit and an impedance control circuit, a canceller/equalizer, and a receiver.

21. (Original) The communications medium of claim 20 wherein the impedance control circuit modifies a driver output signal as a function of an external signal.

22. (Original) The communications medium of claim 20 wherein the canceller/equalizer connects to a driver line and a driver output, and wherein the canceller/equalizer generates a receive signal as a function of data on the driver line and the driver output.

23. (Currently Amended) A communications medium comprising:

a processor with at least one processor line; and

a transceiver connected to the processor and to the communications ~~medium~~ medium,

wherein the transceiver comprises a link level protocol, a driver, a canceller/equalizer, and a receiver including a receiver circuit and a bit deskew circuit .

24. (Original) The computer system of claim 23 wherein the bit deskew circuit deskews signals from the receiver circuit as a function of a clock signal.

25. (Original) The communications medium of claim 23 wherein the canceller/equalizer connects to a driver line and a driver output, and wherein the canceller/equalizer generates a receive signal as a function of data on the driver line and the driver output.

26. (Currently Amended) A communications medium comprising:

a processor with at least one processor line; and

a transceiver connected to the processor and to the communications ~~medium~~ medium,

wherein the transceiver comprises a link level protocol, a driver including a driver circuit and an impedance control circuit, a canceller/equalizer, and a receiver including a receiver circuit and a bit deskew circuit .

27. (Original) The computer system of claim 26 wherein the impedance control circuit modifies a driver output signal as a function of an external signal.

28. (Original) The computer system of claim 26 wherein the bit deskew circuit deskews signals from the receiver circuit as a function of a clock signal.

29. (Original) The communications medium of claim 26 wherein the canceller/equalizer connects to a driver line and a driver output, and wherein the canceller/equalizer generates a receive signal as a function of data on the driver line and the driver output.